

REMARKS

Claims 73-74, 76-89, 91, 98, 100-110, 122-127, 150-151, 154 and 159-257 are pending, claims 82-89, 91, 98 and 100-110 are allowed, claims 174-193, 200-202 and 206-255 are objected to, and the remaining claims are rejected. Applicants have requested that claims 73, 100-101, 122, 125, 127, 159, 172-174, 178, 184, 188, 190, 194 and 252 be amended, and claims 75, 77-78, 80-81, 90, 92-97, 99, 111-121, 167-171, 175-177, 179-183, 185-187 and 189 be canceled, to place this application in condition for allowance.

I. Removal of Finality

The Office action cites new prior art against this application, including Sircar and Toyama, and states that the new grounds of rejection were necessitated by applicants' claim amendments. However, because the October 15, 2003, Office action was made final, applicants have not had a complete opportunity to prosecute claims the pending claims, particularly claims 159-257, in view of the newly cited art. Final rejection is proper in a second action "except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of claims nor based on information in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c)." M.P.E.P., 8th Ed., Rev. 1 at 700-73. This final rejection therefore is improper and applicants request withdrawal of finality.

II. Specification

The specification is objected to as allegedly failing to provide antecedent basis for the phrase "by a process other than dehydration." Applicants respectfully disagree. Embodiments of applicants' process as described in the present application clearly establish that separated water is not a product of the processes described in the present application. With respect to applicants' currently claimed process where the contaminant is water, such water first is substantially removed from a feed flow by, for example, water adsorption onto a dessicant. The substantially dehydrated feed fluid then is subjected to fluid separation by a pressure swing over adsorbers. Therefore, support for the phrase "by a process other than dehydration" is inherent in applicants' disclosure.

Moreover, applicants' claims generally are directed to pressure swing processes, not all possible product purification processes, as alleged by the Office action. Express claim features directed to pressure swing production of a product gas are included in, for example, independent claims 73 and 122. For these reasons, applicants disagree that the specification does not support the pending claims.

Nevertheless, solely to facilitate prosecution and to place the present application in condition for allowance, applicants have deleted the phrase "by a process other than dehydration" from independent claims 73 and 122. This amendment renders the objection to the specification moot, and applicants therefore request that this objection be withdrawn.

III. Claim Objections

Applicants have canceled claim 77 without prejudice. Applicants reserve the right to prosecute applications having claims with the features of claim 77 in continuing applications.

Applicants have amended claim 100 to delete "a" to address the objection stated concerning this claim.

In view of these amendments, applicants request that the objection to claims 77 and 100 be withdrawn.

IV. Rejections under 35 U.S.C. § 112, first paragraph

Claims 73-74, 76-79 and 122-127 are rejected under 35 U.S.C. § 112, first paragraph, for allegedly being indefinite. Applicants traverse this rejection and request that it be withdrawn.

Applicants have canceled claims 77-78, and have requested that claims 73 and 122 be amended to delete "by a process other than dehydration." For the reasons stated above, applicants disagree that the phrase is not adequately supported by the specification. Applicants intended, by the addition of this phrase, to clarify that the cited prior art solely is directed to a dehydration process. Claimed embodiments of the present invention are directed to producing a product other than water, so that water is substantially removed from a feed fluid before the primary gas-producing PSA process is

initiated.

Applicants submit that the rejection of claims 73-74, 76-79 and 122-127 under 35 U.S.C. § 112, second paragraph, has been addressed and therefore request that such rejection be withdrawn.

V. Rejections under 35 U.S.C. § 112, second paragraph

Claims 101, 125, and 127 are rejected as allegedly being indefinite. Applicants traverse this rejection and request that it be withdrawn.

Specifically, applicants have amended claim 101 to delete “zeolite Y.” Applicants’ amendment should not be construed to mean that a method that utilizes zeolite Y is outside the scope of claim 101 as amended. Rather, applicants’ amendment clarifies that “zeolite Y” is a species within the class of zeolites as still specifically recited in claim 101 following entry of applicants’ amendment.

Applicants disagree that claims 125 and 127 are indefinite. The Office action contends that such claims do not recite whether one item, or all of the items listed, are being selected. The only way to reach this conclusion is to ignore the express claim language “and combinations thereof.” This phrase unambiguously establishes that both a single item of the list can be selected, or any of all possible combinations of the recited features.

Nevertheless, solely to place these claims in condition for allowance, applicants have amended claims 125 and 127 to include the Markush language suggested by the Examiner.

VI. Rejections under 35 U.S.C. § 102 over Sircar

Claims 159-160, 163-164, 167-168, 171-172, 194-195, 203-204 and 256 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Sircar, U.S. Patent No. 4,756,723 (Sircar). Applicants traverse this rejection and request that it be withdrawn.

Applicants have amended independent claim 159, from which the remaining rejected claims depend, either directly or indirectly, to include the features of pending claims 167 and 182. Claim 182 was objected to by the Examiner, and hence the

amendments to independent claim 159 to include the features of claim 182 places independent claim 159, and all claims that depend therefrom, in condition for allowance.

As currently understood, Sircar does not teach using a layer of guard material, and reducing diffusion of the at least one contaminant from the guard material to the at least one contaminant sensitive adsorbent material. Applicants therefore request that the rejection of independent claim 159, and the claims that depend therefrom, under 35 U.S.C. § 102 be withdrawn.

VII. Rejections under 35 U.S.C. § 102 over Toyama

Claims 159, 163, 194, 203 and 256 are rejected as allegedly being anticipated by Toyama, U.S. Patent No. 3,594,984. Applicants traverse this rejection and request that it be withdrawn.

As stated above, applicants have requested that independent claim 159 be amended to include the features of dependent claim 167 and objected-to claim 182. This amendment distinguishes Toyama, and hence the rejection of claims 159, 163 and 256 should be withdrawn.

Applicants also have requested that claim 194 be amended to be an independent claim, and to include the features of claim 159 as pending prior to entry of applicants' current amendment. Claim 194 also specifies that the contaminant is from a source other than the feed fluid. Support for this amendment can be found throughout applicants' specification. For example, the source of the contaminant can be from the product end, not from the feed end.

The prior art cited against this application does not teach or suggest a method for reducing contamination of a contaminant-sensitive adsorbent material from a contaminant source other than the feed fluid.

Moreover, claim 194 also states that the apparatus includes a process containment seal, which applicants define on page 15 of the application as filed. The cited prior art does not teach or suggest devices having a process containment seal as defined by applicants. Thus, claim 194 and the claims that depend therefrom are patentable in view of the cited prior art for at least these two reasons, i.e., using a device comprising a process containment seal, and precluding contamination of a contaminant-sensitive

adsorbent material from a contaminant source other than the feed fluid.

VIII. Rejections under 35 U.S.C. § 103 over Sircar and Dangieri

Claims 73-74, 77, 79, 161, 165, 169, 173, 196, 198-199 and 205 are rejected under 35 U.S.C. § 103 as allegedly being obvious over Sircar and Dangieri *et al.*, U.S. Patent No. 4,406,675. Applicants traverse this rejection and request that it be withdrawn.

Applicants have amended independent claim 73 to include the features of dependent claims 77-78, and have canceled claims 77-78. Claim 78 has not been rejected in view of the cited prior art. Moreover, the prior art of which applicants are aware does not teach or suggest isolating a first guard layer zone from a second adsorbent zone. As a result, independent claim 73, and claims 74 and 79 that depend therefrom, are in condition for allowance.

Independent claim 159 has been amended to include the features of objected-to claim 182, and claim 182 has been canceled. As a result, independent claim 159, and claims 173, 196, 198-199 and 205, which depend therefrom, are in condition for allowance.

Claim 169 has been canceled without prejudice.

For the reasons stated above, applicants request that the rejection of claims 73-74, 77, 79, 161, 165, 169, 173, 196, 198-199 and 205 under 35 U.S.C. § 103 be withdrawn.

IX. Rejection of Claim 257 under 35 U.S.C. § 103 over Sircar

Claim 257 depends from claim 159. Applicants have amended independent claim 159 to include the features of objected-to claim 182 to place the independent claim in condition for allowance. This amendment also addresses the rejection of claim 257, and applicants therefore request that this rejection be withdrawn.

X. Rejection under 35 U.S.C. § 103 over Sircar, Dangieri and Mattia

Claims 76, 162, 166, 170 and 197 are rejected as allegedly being obvious over Sircar in view of Dangieri, and further in view of Mattia, U.S. Patent No. 4,452,612. Applicants traverse this rejection and request that it be withdrawn.

Claim 76 depends from independent claim 73. As stated above, applicants have

amended independent claim 73 to include the features of dependent claims 77-78, and have canceled claims 77-78. As a result, independent claim 73, and the claims that depend therefrom, are in condition for allowance.

Claims 162, 166 and 197 depend from independent claim 159. Applicants have amended independent claim 159 to include the features of objected-to claim 182 to place the independent claim in condition for allowance. This amendment also addresses the rejection of claims 162, 166 and 197.

Applicants have canceled claim 170 without prejudice.

For the reasons stated above, applicants request that the rejection of claims 76, 162, 166, 170 and 197 as allegedly being obvious over Sircar in view of Dangieri, and further in view of Mattia, be withdrawn.

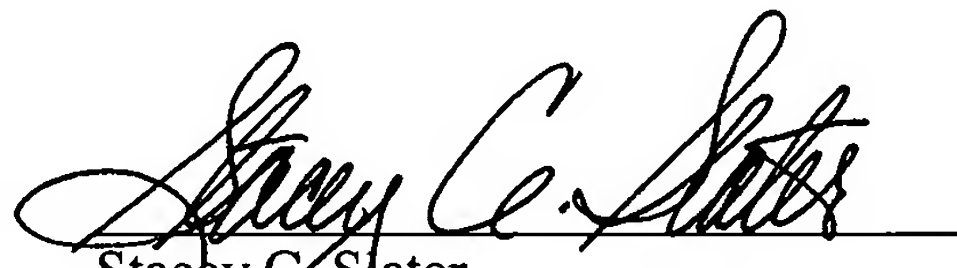
XI. Rejection under 35 U.S.C. § 103 over McKey, Dangieri and Mattia

Claims 80-81, 150-151 and 154 are rejected as allegedly being obvious over McKey, U.S. Patent No. 4,127,395 in view of Dangieri, and further in view of Mattia. These claims have been canceled without prejudice, and hence this rejection should be withdrawn.

The present application is in condition for allowance, and such action is requested.

Respectfully submitted,

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